



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0704; Directorate Identifier 2012-SW-040-AD;

Amendment 39-17113; AD 2012-13-11]

RIN 2120-AA64

Airworthiness Directives; Eurocopter Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Eurocopter Deutschland GmbH (ECD) Model MBB-BK 117 (all versions) and BO-105LS A-3 helicopters. This AD requires inspecting the tail rotor pitch link spherical bearing for proper swaging. This AD is prompted by a report of a tail rotor pitch link with a spherical bearing that had migrated out of the bearing bore. The actions specified by this AD are intended to prevent failure of the tail rotor pitch link and subsequent loss of control of the helicopter.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

EXAMINING THE AD DOCKET: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact Able Engineering and Support Services, 2920 East Chambers Street, Phoenix, AZ 85040; telephone (602) 304-1227; fax (602) 304-1277; e-mail info@ableengineering.com. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Sharon Miles, Aviation Safety

Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5110; email sharon.y.miles@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

Able Engineering & Component Services (Able) received a report of a tail rotor pitch link with a spherical bearing that had migrated out of the bearing bore. Investigation by Able revealed that the migration resulted from the spherical bearing being improperly swaged during a repair process and that the affected parts were limited to those repaired after January 1, 2011. Able determined that an inspection of other tail rotor pitch links

repaired after that date is necessary to determine their airworthiness and issued Alert Service Bulletin (ASB) No.: 2012-001, Revision IR, dated March 7, 2012 (Able ASB).

On March 19, 2012, Eurocopter issued one ASB with multiple numbers: Eurocopter Emergency Alert Service Bulletin (EASB) No. BO105 LS-30A-013 for model BO-105LS A-3 helicopters; EASB No. BO105 LS A-3-STC-0654/3058-30A-001 for model BO-105LS A-3 Superlifter helicopters; EASB No. MBB-BK117-30A-115 for model MBB-BK 117 A-1, A-3, A-4, B-1, B-2, and C-1 helicopters; and EASB No. MBB-BK117 C-2-67A-016 for model MBB-BK117 C-2 helicopters, all Revision 0. The EASB specifies complying with the inspection described in the Able ASB.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other helicopters of these same type designs.

Related Service Information

We reviewed the Able ASB, which identifies certain tail rotor pitch links (pitch links) that are affected by the improper swaging of the spherical bearings. The Able ASB describes procedures to remove the pitch links and visually inspect the spherical bearings with an 8X magnifying glass for a bearing that has not been swaged and will migrate out of the bearing bore. If a pitch link is discovered with a bearing not properly swaged, the Able ASB specifies removing the pitch link from service and returning it to Able Engineering.

AD Requirements

This AD requires:

- Removing the pitch link from the helicopter and cleaning the spherical bearings.
- Applying hand pressure to the bearing faces and inspecting with an 8X or higher power magnifying glass for complete swaging of the bearing bore.
- If the pitch link has not been completely swaged, removing the pitch link and replacing it with an airworthy pitch link.

Differences between this AD and the Service Information

The service information requires returning unairworthy pitch links to Able Engineering; this AD does not. The Eurocopter ASB applies to the Model BO105 LS A-3 “Superlifter,” and this AD does not as that model is not type certificated in the U.S.

Costs of Compliance

We estimate that this AD will affect 130 helicopters of U.S. Registry, and that operators may incur the following costs in order to comply with this AD. Inspecting each pitch link will require about 1.5 work hours at an average labor rate of \$85 per hour, for a total cost per helicopter of about \$127 and a cost to the U.S. operator fleet of \$16,510. If required, replacing a pitch link with an airworthy pitch link will require about 1.5 work hours at an average labor rate of \$85 per hour, and required parts will cost \$1,442, for a total cost per helicopter of about \$1,569.

FAA’s Justification and Determination of the Effective Date

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because some of the corrective actions must be accomplished before further flight.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in less than 30 days.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-13-11 EUROCOPTER DEUTSCHLAND GMBH HELICOPTERS:

Amendment 39-17113; Docket No. FAA-2012-0704; Directorate Identifier 2012-SW-040-AD.

(a) Applicability.

This AD applies to Eurocopter Deutschland GmbH (ECD) Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, MBB-BK 117 C-1, MBB-BK 117 C-2, and BO-105LS A-3 helicopters, with a tail rotor pitch link (pitch link) part number (P/N) 117-31821, 117-31822, or B642M1018101 with a serial number listed in Appendix 1 of Able Engineering & Component Services (Able) Alert Service Bulletin (ASB) No. 2012-001, Revision IR, dated March 7, 2012, installed, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as an improperly swaged spherical bearing on the pitch link, which could result in loss of tail rotor control and subsequent loss of control of the helicopter.

(c) Effective Date.

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance.

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions.

For pitch links installed within the last 10 hours time-in-service (TIS), before further flight; for all other affected pitch links, within the next 10 hours TIS:

(1) Remove the pitch link.

(2) Clean the area around the spherical bearings and pitch link bearing bore

chamfer.

(3) Apply axial hand pressure to the faces of both spherical bearings as shown in Figure 1 to Paragraph (e) of this AD.



Figure 1 to Paragraph (e)

(4) Using an 8X or higher power magnifying glass, inspect the boundaries between the bearing and the bearing bore chamfer surface. Determine that the bearings have been completely swaged and there is no gap between the edge of the bearing and the chamfer as shown in Figure 2 to Paragraph (e) of this AD.



Figure 2 to Paragraph (e)

(5) If a bearing is not completely swaged or there is a gap between the edge of the bearing and the chamfer, as shown in Figure 3 to Paragraph (e) of this AD, replace the pitch link with an airworthy pitch link.



Figure 3 to Paragraph (e)

(f) Special flight permits.

Special flight permits will not be issued.

(g) Alternative Methods of Compliance (AMOCs).

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Sharon Miles, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5110; email sharon.y.miles@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(h) Subject.

Joint Aircraft Service Component (JASC) Code: 6420: Tail Rotor Head.

(i) Material Incorporated by Reference.

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Able Engineering & Component Services Alert Service Bulletin No. 2012-001, Revision IR, dated March 7, 2012.

(ii) Reserved.

(3) For Able Engineering & Component Services service information identified in this AD, contact Able Engineering & Component Services, 2920 East Chambers Street, Phoenix, AZ 85040; telephone (602) 304-1227; fax (602) 304-1277; e-mail info@ableengineering.com.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(5) You may also view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

Issued in Fort Worth, Texas, on July 2, 2012.

Kim Smith,

Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2012-17559 Filed 07/20/2012 at 8:45 am; Publication Date: 07/23/2012]